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8 **BEFORE THE**  
**BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS**  
9 **DEPARTMENT OF CONSUMER AFFAIRS**  
10 **STATE OF CALIFORNIA**

11 In the Matter of the Accusation Against:

Case No. 882-A

12 **FRANCISCO MOLINA, JR.**  
810 Morrill Street  
13 Hayward, California 94541

**ACCUSATION**

14 **Civil Engineer License No. C28116**

15 Respondent.  
16

17 Complainant alleges:  
18

19 **PARTIES**

20 1. David Brown (Complainant) brings this Accusation solely in his official capacity as  
21 the Executive Officer of the Board for Professional Engineers and Land Surveyors, Department  
22 of Consumer Affairs.

23 2. On or about August 10, 1977, the Board for Professional Engineers and Land  
24 Surveyors issued Civil Engineer License Number C28116 to Francisco Molina, Jr. (Respondent).  
25 The Civil Engineer License was in full force and effect at all times relevant to the charges brought  
26 herein and will expire on March 31, 2010, unless renewed.

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## JURISDICTION

3. This Accusation is brought before the Board for Professional Engineers and Land Surveyors (Board), Department of Consumer Affairs, under the authority of the following laws. All section references are to the Business and Professions Code (Code) unless otherwise indicated.

## STATUTORY PROVISIONS

4. Section 6775 of the Code states, in pertinent part, that "[T]he board may reprove, suspend for a period not to exceed two years, or revoke the certificate of any professional engineer registered under this chapter:

....

"(c) Who has been found guilty by the board of negligence or incompetence in his or her practice. . . ."

5. Section 125.3 of the Code provides, in pertinent part, that the Board may request the administrative law judge to direct a licentiate found to have committed a violation or violations of the licensing act to pay a sum not to exceed the reasonable costs of the investigation and enforcement of the case.

6. Section 118, subdivision (b), of the Code provides that the expiration, surrender, or cancellation of a license shall not deprive the Board of jurisdiction to proceed with a disciplinary action during the period within which the license may be renewed, restored, reissued or reinstated.

## PROPERTY ON BURR STREET IN OAKLAND, CALIFORNIA

7. On or about August 18, 2003, Respondent entered into a written contract with Raymundo Reyes to provide structural calculations, grading plans, and drainage and sewage plans for a property on Burr Street in Oakland, California, for a total fee of \$6,000.00. Respondent was paid the fee in full but failed to obtain approval of the plans.

8. In preparing plans for the above-mentioned Burr Street property, Respondent committed certain acts or omissions in his calculations, which are hereafter set forth.

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1           Calculations: (Comments based on Revision 1 set of drawings dated June 9, 2004)

2           A.   (From Sheet 1 of Calculations): Respondent calculated the roof trusses' dead  
3 load at 2.0 pounds per square foot (psf) in violation of 2001 California Building Code section  
4 1606. The roof trusses' dead load should have been calculated at approximately 4.35 psf. Also,  
5 the second floor diaphragm load is low because it does not include drywall weight. The above-  
6 described conduct by Respondent constitutes negligence.

7           B.   (From Sheet 4 of Calculations): In seismic calculations, the space between the  
8 first level and top of the garage shall be included in seismic mass and vertical distribution.  
9 Respondent's calculations show that the exposed concrete footings/grade beams of the structure  
10 are approximately 7'0" (average) above grade, in violation of 2001 California Building Code  
11 section 209. The above-described conduct by Respondent constitutes negligence.

12           C.   (From Sheet 4 of Calculations): Respondent failed to provide calculations for  
13 determination of seismic reliability/redundancy factor for the structure, in violation of 2001  
14 California Building Code section 1630.1.1. The above-described conduct by Respondent  
15 constitutes negligence.

16           D.   (From Sheet 8 of Calculations): In wind load calculations, Respondent used  
17 wind exposure "B." Oakland City Code, however, requires wind exposure "C" to be used in wind  
18 load calculations. The above-described conduct by Respondent constitutes negligence.

19           E.   (From Sheet 10 of Calculations): Respondent's calculations provided model  
20 result only. Respondent failed to provide complete calculations for concrete walls, retaining  
21 walls, elevated concrete slab (garage roof), and all shallow and deepened footings, in violation of  
22 2001 California Building Code section 106.3.3. The above-described conduct by Respondent  
23 constitutes negligence.

24           F.   (From Sheet 10 of Calculations): Respondent's model of pier location plan on  
25 sheet 10 of the calculations does not match the plan on sheet 1 of the drawings, in violation of  
26 2001 California Building Code section 106.3.3. The above-described conduct by Respondent  
27 constitutes negligence.  
28

1 G. (From Sheet 12 of Calculations): Respondent failed to provide complete  
2 calculations for piles strength, embedment into soil, and deformation, failed to apply the effects of  
3 creep forces to all piles, grade beams, and footings, failed to design the exposed portions of piles  
4 as cantilevered columns, and failed to print the sheet in color so that the unity check could be  
5 seen, in violation of 2001 California Building Code sections 1806.8, 1808.2, and 1809. The  
6 above-described conduct by Respondent constitutes negligence and incompetence.

7 H. (From Sheets 13 through 15 of Calculations): Respondent's computer output  
8 models and forces are illegible, in violation of 2001 California Building Code sections 1063.2 and  
9 106.3.3. The above-described conduct by Respondent constitutes negligence.

10 I. (From Sheet 38 of Calculations): Respondent failed to provide calculations for  
11 the truss member connection, in violation of 2001 California Building Code section 106.3.3. The  
12 above-described conduct by Respondent constitutes negligence.

13 J. (From Sheets 42 through 44 of Calculations): Respondent's computer output  
14 models, nodes, and forces are illegible, in violation of 2001 California Building Code section  
15 106.3.3. The above-described conduct by Respondent constitutes negligence.

16 9. In preparing plans for the above-mentioned Burr Street property, Respondent  
17 committed certain acts or omissions in his drawings, which are hereafter set forth.

18 Drawings (Comments based on Revision 1 set of drawings dated June 9, 2004)

19 A. (From Sheet 1 of Drawings): Respondent failed to include the list of adopted  
20 codes, and noted and referred to the 1997 Uniform Building Code which was obsolete at the time  
21 of these plans. The above-described conduct by Respondent constitutes negligence.

22 B. (From Sheet 1 of Drawings): Respondent failed to provide a complete  
23 foundation plan, showing instead only an incomplete foundation pier location plan which was not  
24 to a  $\frac{1}{2}" = 1'0"$  scale as indicated, in violation of 2001 California Building Code section 106.3.3.  
25 The above-described conduct by Respondent constitutes negligence.

26 C. (From Sheet 1 of Drawings): Respondent failed to provide details for piles  
27 (piers) and walls indicated as W-P1 through W-P4 on the east side and as shown on foundation  
28 pier location, and the number of piles designated as N-P1 through N-P4 does not match the

1 number of piles on Sheet 11, in violation of 2001 California Building Code section 106.3.3. The  
2 above-described conduct by Respondent constitutes negligence.

3 D. (From Sheet 2 of Drawings): Respondent failed to clearly indicate the levels of  
4 the building on the site plan. The extent of the garage roof level is not shown, the entry balcony  
5 of level one is not shown, the balconies on level two are not labeled, half of the lines for the  
6 dormer roofs are missing, the extent of the roof drip lines and gutters is unclear, and the exterior  
7 staircase from grade to the garage roof level is missing information for landings and connection to  
8 the building. The above-described conduct by Respondent constitutes negligence.

9 E. (From Sheet 2 of Drawings): Respondent depicts the roof as hips and eaves in  
10 the north and south elevations, and as gable end rake and gable walls in the east and west  
11 elevations, site plan, and framing layout. In addition, lines are missing for the north side of the  
12 garage and level two balconies. The above-described conduct by Respondent constitutes  
13 negligence.

14 F. (From Sheet 3 of Drawings): For the level one floor plan, Respondent failed to  
15 label rooms, the floor level of the garage roof below, and the entry balcony. Further, the level  
16 one entry balcony is shown hatched but without an indication of the guardrails showing the true  
17 extent of hatching on the balcony. The exterior staircase from the garage roof level to the entry  
18 balcony of level one is missing dimensions and landing elevation information. Also, there are  
19 missing wall and door lines at the bathroom. The above-described conduct by Respondent  
20 constitutes negligence.

21 G. (From Sheet 3 of Drawings): For the level two floor plan, Respondent failed to  
22 label rooms, and there are missing wall and door lines at the bedroom and hallway. Further, the  
23 line work for the waste piping is not labeled and the text is illegible. The floor opening for the  
24 interior staircase is missing dimensions. The above-described conduct by Respondent constitutes  
25 negligence.

26 H. (From Sheet 3 of Drawings): Respondent's notes reference building code  
27 sections obsolete as of the date of the plans, and Note 1 regarding smoke alarms is incomplete  
28 and does not address all of the requirements of 2001 California Building Code section 310.9.1 for

1 the power and specific layout conditions of the structure. The above-described conduct by  
2 Respondent constitutes negligence.

3 I. (From Sheet 5 of Drawings): Respondent's drawings indicate the stair handrail  
4 is to be attached to the top rail of a 42" high guardrail without an additional indication that the  
5 maximum handrail height pursuant to 2001 California Building Code section 1003.3.6 is 38"  
6 above tread nosing. Further, the text notes for the handrails are illegibly small, and the minimum  
7 tread depth of 9" is not indicated. The above-described conduct by Respondent constitutes  
8 negligence.

9 J. (From Sheet 5 of Drawings): Notes 9 – 20 pertaining to nailing wood members  
10 are incomplete and do not conform to 2001 California Building Code Table 23-II-B-1. The  
11 above-described conduct by Respondent constitutes negligence.

12 K. (From Sheet 5 of Drawings): Respondent fails to provide complete material  
13 specifications for concrete, steel, and wood, thereby compromising the use of the appropriate type  
14 of materials, in violation of the 2001 California Building Code. The above-described conduct by  
15 Respondent constitutes negligence.

16 L. (From Sheet 5 of Drawings): Respondent failed to specify the beams at the edge  
17 of the balcony, in violation of 2001 California Building Code section 106.3.3. The above-  
18 described conduct by Respondent constitutes negligence.

19 M. (From Sheet 5 of Drawings): Respondent failed to call out stud walls on the  
20 north, south, and west walls and, although the stud walls on the east wall are called out, spacing  
21 and grade are not indicated. Further, there is no indication that the exterior walls around the stairs  
22 are ballooned-framed as required because they are not laterally supported at the second floor  
23 level, in violation of 2001 California Building Code section 2308 and Table 23-IV-B. The above-  
24 described conduct by Respondent constitutes negligence.

25 N. (From Sheet 5 of Drawings): Respondent failed to call out the shear wall  
26 specifications on the north, south, and west walls, and although the shear wall thickness and grade  
27 are called out on the east wall, the nailing is missing, in violation of 2001 California Building  
28 Code section 23II-I-1. The sill plate nailing and possible tie downs are also missing. This



1 omission compromises the resistance of the structure against lateral loads which may cause  
2 damage to or failure of the structure, in violation of 2001 California Building Code section  
3 2315.3.3. The above-described conduct by Respondent constitutes negligence.

4 O. (From Sheet 5 of Drawings): Respondent failed to provide details for shear  
5 transfer of lateral forces at the floor levels, in violation of 2001 California Building Code section  
6 1605. Further, there is no continuous load path. The anchor bolt spacing shall be designed and  
7 detailed according to shear wall strength to transfer the lateral loads to the foundation. The  
8 omission of the details for shear transfer of lateral forces compromises the continuity of the  
9 continuous load path and may cause damage to or failure of the upper roof/floor structures. The  
10 above-described conduct by Respondent constitutes negligence.

11 P. (From Sheet 6 of Drawings): Notes 31 and 32 reference California Building  
12 Code sections obsolete as of the date of the plans, and Note 36 regarding stairs and handrails is  
13 erroneous. The above-described conduct by Respondent constitutes negligence.

14 Q. (From Sheet 6 of Drawings): Respondent failed to indicate the requirements for  
15 underfloor or crawlspace ventilation for the structure, in violation of 2001 California Building  
16 Code section 2317.7. Note 22 specifies crawlspace vents but does not indicate the required  
17 numbers or locations. Further, linework for the floors is missing from the building section. The  
18 above-described conduct by Respondent constitutes negligence.

19 R. (From Sheet 6 of Drawings): Respondent failed to provide details for shear  
20 transfer of lateral forces at the roof level, in violation of 2001 California Building Code section  
21 1605, and there is no continuous load path. Typical shear transfer blockings between trusses are  
22 missing in cornice detail and sections, which compromises the continuity of the continuous load  
23 path and may cause damage to or failure of the upper roof/floor structure, in violation of 2001  
24 California Building Code section 1605. The above-described conduct by Respondent constitutes  
25 negligence.

26 S. (From Sheet 6 of Drawings): Respondent failed to provide roof and floor  
27 sheathing thickness, panel grade, and panel index. Also, no details are provided for the plywood  
28 panel layout. The above-described conduct by Respondent constitutes negligence.

1 and to ensure the overall stability of the deep foundation system. The above-described conduct  
2 by Respondent constitutes negligence.

3 EE. (From Sheet 10 of Drawings): Respondent failed to provide concrete wall  
4 anchors for out-of-plane forces at the west concrete wall above the garage roof, in violation of  
5 2001 California Building Code section 1605.2.3. The above-described conduct by Respondent  
6 constitutes negligence.

7 FF. (Sheet 11 of Drawings): Respondent depicted five piles (piers) which is in  
8 conflict with the foundation pier location on Sheet 1 of the Drawings. Further, Respondent failed  
9 to indicate pile embedment lengths. Piles (piers) should be extended into hard sedimentary  
10 material at least 5'0" pursuant to page 7 of the soil report. The above-described conduct by  
11 Respondent constitutes negligence.

12 GG. (From Sheet 11 of Drawings): Respondent failed to interconnect concrete piles  
13 (piers) in two directions. No ties are provided to connect the piles to each other perpendicular to  
14 the grade beams even though the soil engineer recommended interconnecting the piles on page 7  
15 of the soil report. This is in violation of 2001 California Building Code section 1807.2. The  
16 above-described conduct by Respondent constitutes negligence.

17 HH. (From Sheet 11 of Drawings): Respondent failed to detail the concrete wall to  
18 pile connections for the side and bottom connection conditions as shown in section B/11-1.  
19 Further, it is not clear how the vertical and lateral forces of the grade beams are transferred to the  
20 piles. Section B presents conflicting reinforcing bar spacing and the expansion joint detail  
21 (without detail number). Wall reinforcing bars are not indicated at center line of wall thickness.  
22 The above-described conduct by Respondent constitutes negligence.

23 II. (From Sheet 12 of Drawings): Respondent failed to provide details for the shear  
24 transfer of lateral forces at the roof and floor levels as red-marked in Section E/12-2, in violation  
25 of 2001 California Building Code section 1605. Further, there is no continuous load path. The  
26 above-described conduct by Respondent constitutes negligence.

27 JJ. (From Sheet 12 of Drawings): Detail L/12-2 depicts six #5 longitudinal  
28 reinforcing bars which is only 0.007 (0.07%) of the gross area, in violation of 2001 California



1 Building Code section 11910.9.1, which requires that non-composite compression members shall  
2 have not less than 0.01 (1%) gross area longitudinal reinforcing bars. Further, there is a conflict  
3 in the size of the concrete column supporting a 5.125" x 12" Glu-Lam beam as red-marked in  
4 Detail E1/12-2. The above-described conduct by Respondent constitutes negligence and  
5 incompetence.

6 KK. (From Sheet 12 of Drawings): Detail L/12-2 is missing dimensions, pedestal  
7 size, and reinforcements for the east wall footing as red-marked. There are no dimensions or  
8 indications to show how deep the footing should be embedded into competent soil pursuant to the  
9 soil report. The above-described conduct by Respondent constitutes negligence and  
10 incompetence.

11 **CAUSE FOR DISCIPLINE**

12 **(Negligence and/or Incompetence)**

13 10. Paragraphs 7, 8, and 9 are herein incorporated by reference as though fully set forth.

14 11. Respondent has subjected his license to discipline under Code section 6775(c) in that  
15 he was negligent and/or engaged in incompetence in the practice of civil engineering in on or  
16 about 2003-2004, by virtue of the conduct alleged in paragraphs 7, 8, and 9 above.

17 **PRAYER**

18 WHEREFORE, Complainant requests that a hearing be held on the matters herein alleged,  
19 and that following the hearing, the Board for Professional Engineers and Land Surveyors issue a  
20 decision:

21 1. Revoking or suspending Civil Engineer License Number C28116, issued to Francisco  
22 Molina, Jr.;

23 2. Ordering Francisco Molina, Jr. to pay the Board for Professional Engineers and Land  
24 Surveyors the reasonable costs of the investigation and enforcement of this case, pursuant to  
25 Business and Professions Code section 125.3; and

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3. Taking such other and further action as deemed necessary and proper.

DATED: \_\_\_\_\_

2/17/10

Original Signed

DAVID BROWN  
Executive Officer  
Board for Professional Engineers and Land Surveyors  
Department of Consumer Affairs  
State of California  
*Complainant*

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